|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| User | |  | |  | |
| name  login  viewTable  viewGraph | Table,  Graph |  |  |  |  |
| User  Grad Student | | User  Researcher | | User  Librarian | |
| requestSources  viewTwitterInfo | News Source | addSources  addKeywords  addTwitterHandle  deleteSources  deleteKeywords  grantPermissions  viewTwitterInfo | Article Crawler,  News Source,  Keyword List,  Twitter Handle List,  Twitter Crawler | exportData | Article Parser |
| Hyperlink | | Mention | | Quote | |
| url  newsSource | Article Parser,  Article | newsSource | ArticleParser | newsSource | Article Parser |
| News Source | | Article | | Twitter Handle List | |
| url  twitterHandle  articleList | Grad Student,  Researcher,  Article,  Twitter Handle List | name  url  hyperlinkList  quoteList  mentionList | News Source,  Keyword List,  Hyperlink,  Quote,  Mention | name | Twitter Crawler, |
| Table | | Graph | | Keyword List | |
| displayRelationships  getData | User,  Article Parser | drawGraph  getData | Table,  Twitter Crawler,  User | keywords | Article |
| Article Crawler | | Article Parser | | Twitter Crawler | |
| findArticles | News Source,  Article,  Keyword List | findHyperlink  findMention  findQuote  formatData | Hyperlink,  Mention,  Quote,  Table,  Librarian | findTweets | Twitter Handle List,  Keyword List |